PART NO. TTJBC-EN-00

HITACHI

Reliable solutions

Technical Manual
Troubleshooting

ZX
870-5B
870LC-5B
870H-5B
870LCH-5B
870R-5B
870LCR-5B
Hydraulic Excavator

Service Manual consists of the following separate Part No.

Technical Manual (Operational Principle)	: Vol. No.TOJBC-EN
Technical Manual (Troubleshooting)	: Vol. No.TTJBC-EN
Workshop Manual	: Vol. No.WJBC-EN
Engine Manual	: Vol. No.ETJBA-EN, EWJBA-EN

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SECTION 4

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Test Harness

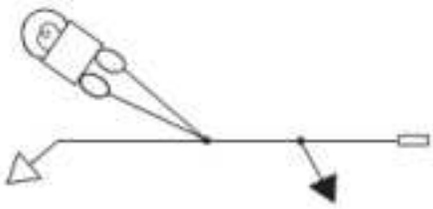
Install a test harness between connectors. Check the circuit condition depending on whether the test harness lamp lights or extinguishes during operation.

- Parts Number 4283594 (ST 7126)

Use in order to check a single-line (discontinuity and/or voltage).

- During Operation: Light is ON.

Parts Number 4283594 (ST 7126)



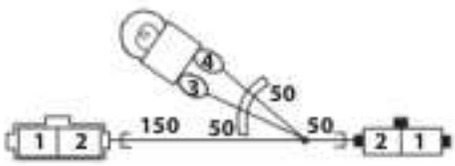
T107-07-05-012

Parts Number (ST 7226)

- Parts Number (ST 7226)

Use in order to check the solenoid valve unit circuits.

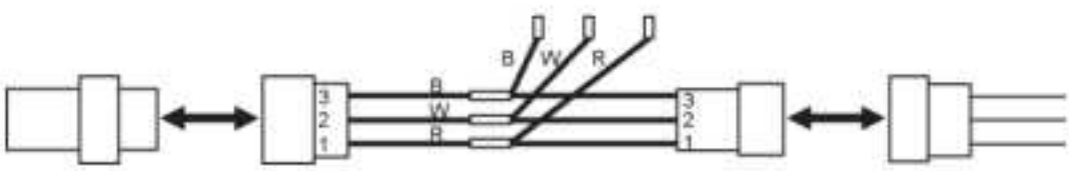
- When the corresponding control lever or switch is operated: Light is ON.



T107-07-06-015

Connect a test harness to the harness end connector of pressure sensor. Check the state of pressure sensor circuit.

- ST 6701 for high-pressure sensor
- ST 6703 for low-pressure sensor



TDAA-05-06-003

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Solenoid Valve Control Failure

Fault Code	Trouble	Cause	Symptoms in Machine Operation When Trouble Occurs	Remedy
15028-2	Assist 1 Abnormal Neutral	When assist 1, 2 solenoid valve output is lower than 0.5 MPa, assist 1 monitoring pressure is higher than 1.2 MPa	All solenoid valves stop output due to pilot cut-off	Check the harness
15029-2	Assist 1 Abnormal Operation	When assist 1, 2 solenoid valve output is higher than 2.2 MPa, assist 1 monitoring pressure is lower than 1.0 MPa	Assist is operated with the 40 % reduced pressure	Check the harness
15034-2	Assist 2 Abnormal Neutral	When assist 3, 4 solenoid valve output is lower than 0.5 MPa, assist 2 monitoring pressure is higher than 1.2 MPa	All solenoid valves stop output due to pilot cut-off	Check the harness
15035-2	Assist 2 Abnormal Operation	When assist 3, 4 solenoid valve output is higher than 2.2 MPa, assist 2 monitoring pressure is lower than 1.0 MPa	Assist is operated with the 40 % reduced pressure	Check the harness

Controller Hardware Failure

Fault Code	Trouble	Cause	Symptoms in Machine Operation When Trouble Occurs	Remedy
15501-2	EEPROM Data Read Error	Faulty controller	-	Replace the controller
15502-2	Abnormal EEPROM	Faulty controller	-	Replace the controller
15503-2	Abnormal RAM	Faulty controller	-	Replace the controller
15504-2	Abnormal A/D Converter	Faulty controller	-	Replace the controller
15506-3	Abnormal Sensor Voltage	Faulty controller Faulty sensor Faulty harness	-	Check the sensor connected to the controller Check the harness Replace the controller

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Rewrite of Muffler Filter Serial No.

When the muffler filter has been replaced, rewrite the serial No. of muffler filter and upload the data to e-Service.

1. Connect MPDr..
2. Set the key switch to the ON position.
3. Select Functions-Engine/Muffler Filter-Muffler Filter NO. with MPDr..
4. Input the following items of Oxidation Catalyst (DOC) and Filter (CSF).

- ASM
- SUB
- Serial No.

5. After inputting, select Setting.

IMPORTANT: After inputting Muffler Filter Serial No. is completed, upload the data to e-Service.

NOTE: When the input data is uploaded to e-Service, the M-Find product specification and history will be updated.

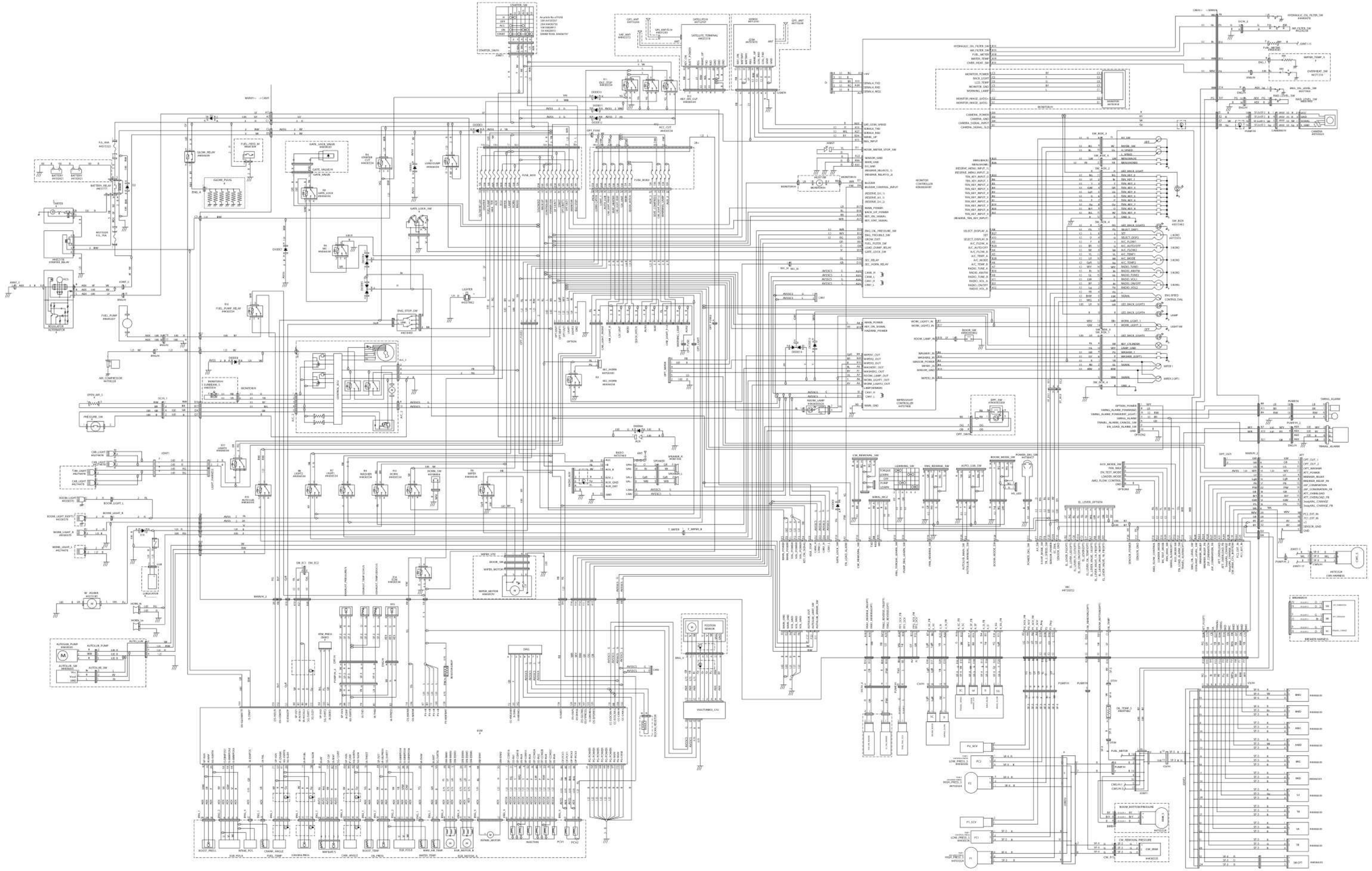


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Attach to Part No. : TTJBC-EN-00

ZX870-5B•870LC-5B•870H-5B•870LCH-5B•870R-5B•870LCR-5B ELECTRICAL DIAGRAM

▲ CAUTION: Parts numbers on the drawing are provided only for reference purpose.
To order parts on the drawing, be sure to consult the Parts Catalog.



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